

DOCUMENT RESUME

ED 273 301

IR 051 627

AUTHOR Parkin, Derral; And Others
TITLE Pharmacy Research Online. A Guide for Faculty.
INSTITUTION Houston Univ., Tex. Libraries.
PUB DATE Apr 86
NOTE 66p.
AVAILABLE FROM For a guide to searching chemistry online, see IR 051 626.
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Academic Libraries; College Faculty; Database Producers; *Databases; Experiential Learning; Higher Education; *Independent Study; *Online Searching; Online Vendors; Pharmacology; *Pharmacy; Research Reports; *Search Strategies; Study Guides; *Users (Information)
IDENTIFIERS Bibliographic Data Bases; Boolean Functions; Boolean Logic; Boolean Operators; Boolean Search Strategy; Chemical Abstracts Service; DIALOG; *University of Houston TX

ABSTRACT

This document is a self-paced training packet developed for a pilot project at the University of Houston-University Park to teach pharmacy faculty members to do their own online searching. The training begins with general topics such as the kinds of searches that can be done effectively online, the selection of appropriate databases to search, and the use of documentation. Basic search concepts such as database structure, Boolean operations, and search strategy formulation are also covered. Exercises give the opportunity for hands-on practice searching DIALOG databases and Chemical Abstracts (CAS) online. Separate handouts provided include an introduction to the pilot project; procedures for searching pharmacy reports online; summaries of basic and CAS commands on DIALOG and Boolean operators; a search strategy worksheet; and an evaluation form. (Author/KM)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED273301

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.

☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

PHARMACY RESEARCH ONLINE

A Guide for Faculty

IR051627

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Sandy Maxfield

BEST COPY AVAILABLE

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

University of Houston - University Park Libraries

CONTRIBUTORS

Derral Parkin

Margaret Culbertson

William J. Jackson

Sandy Maxfield

James W. Oliver

C. Brigid Welch

PRODUCTION ASSISTANT

Erin A. Briggs

CONTENTS

INTRODUCTION.....	1
What Is Online Searching?.....	1
1. WHY SEARCH ONLINE?.....	2
What Kinds Of Searches Can Be Done Most Effectively Online?.....	2
Which Databases Should You Search?.....	3
2. PREPARING TO SEARCH.....	5
Database Structure.....	5
Searchable Fields.....	6
Basic Index.....	7
Additional Indexes.....	7
Boolean Operators.....	7
AND.....	8
OR.....	8
NOT.....	9
Documentation.....	10
Database Producer Documentation.....	10
Online Service Documentation.....	11
3. WRITING THE SEARCH STRATEGY.....	12
Sample Worksheet.....	16
4. DIALOG SYSTEM COMMANDS.....	17
Selecting a Database.....	17
Entering Your Search Strategy.....	17
Searching Fields of the Record.....	18
Combining Terms With Set Numbers.....	19

Truncation of Terms.....	20
Author Searching.....	21
Printing Your Results.....	21
Logging Off DIALOG.....	22
Search Strategy Worksheet.....	23
5. EXECUTING THE SEARCH.....	24
Sample Search.....	24
General Features of ProSearch.....	29
6. CAS ONLINE SYSTEM COMMANDS.....	31
Selecting Your File.....	31
Entering Your Search Strategy.....	31
Searching Fields of the Record.....	32
Author Searching.....	33
Combining Terms With Set Numbers.....	33
Truncation of Terms.....	34
Range Searching.....	35
Printing Your Results.....	35
Disconnecting.....	36
7. PRACTICE SEARCHES.....	37

INTRODUCTION

This year, the Library has begun a one-year pilot project to allow faculty in the College of Pharmacy to do their own online searching of indexes to the journal literature. As a participant in this project you will have the control and convenience of doing your own computerized literature searching on an IBM XT located in the Pharmacy Library. You will have access to two major online services: DIALOG Information Services and CAS Online.

WHAT IS ONLINE SEARCHING?

Using printed indexes to identify bibliographic citations is a familiar process to researchers. Citations can also be identified by online searching, i.e., using a computer to search a bibliographic database.

The search process starts with a question that is refined into a search strategy. The online searcher then uses a computer to connect to an online service. An online service provides access to many databases. The databases are often computerized versions of standard printed indexes such as Index Medicus and Chemical Abstracts. Each online service has unique commands that are used to perform the search strategy in a database. The result of the online search is a list of references, or bibliographic citations, that answer the searcher's question.

This packet of training materials has been designed to assist you in learning the concepts and skills necessary to search online systems effectively. It provides:

- A comparison of traditional and online searching
- An introduction to the structure of bibliographic databases
- Techniques to design an effective search strategy
- An introduction to online system commands
- Procedures for using the computer to search
- Sample searches to practice

1. WHY SEARCH ONLINE?

Convenience is undoubtedly a major factor in choosing to search online. Searching indexes through a computer terminal located close to your office is in most cases faster and easier than using the printed equivalents that may be located across campus in the Main Library. However, searching bibliographic databases by computer is not free, and unless you're working with an unlimited research budget, you'll need to learn to determine which topics can be searched most effectively by computer and which databases are likely to contain the most usable information.

WHAT KINDS OF SEARCHES CAN BE DONE MOST EFFECTIVELY ONLINE?

A computer search can help solve a number of research problems, including the following:

- A complex topic involving several concepts
- New terminology that has not yet been adopted by the indexes
- Subjects seldom treated that may be listed under a broader subject heading in a printed index
- Research involving the use of specific instruments or other measurement devices or specific chemicals or methods that can be identified by name
- Information in articles published too recently to be included in printed indexes

In order to determine if your topic is appropriate for a computer search, it is important to consider the key concepts within your subject carefully. The number of concepts involved or the distinctiveness of the terms are major factors in deciding whether a computer search is appropriate. For example, the subject of environmental pollution of malathion in South America involves several concepts: environmental pollution, malathion, and South America. The computer can quickly sort through hundreds of articles on environmental pollution and pull out only those that mention malathion in South America.

Using the computer to find articles on environmental pollution in general would be far less appropriate, since so much has been written on the subject that it would be quite expensive to print all of the citations that could be identified in a computer search and since the single concept of environmental pollution

can be found easily in printed indexes. Single concepts or terms may be appropriate for computer searching if very little has been written on the subject or if you are looking for a new term that has not yet been picked up in the printed indexes. For example, slim disease or drug diversion are distinctive single concepts that are difficult to find in printed indexes, but easy to locate by computer. Since the computer can search every word in an article's title and abstract, as well as the assigned subject terms, it is invaluable as a tool to identify articles using new terminology.

WHICH DATABASES SHOULD YOU SEARCH?

If you have a topic appropriate for a computer search, you next need to determine which of the hundreds of bibliographic databases are most appropriate for your topic. Research in some subject areas can be satisfied by using only one or two databases, while other areas may require searching in many different databases. Unfortunately, not all printed indexes have online equivalents, so researchers in some fields may have to rely completely on printed sources or use a combination of printed and online indexes. Conversely, some databases are available only online, so researchers interested in the information indexed in those databases must rely completely on computer searching.

When deciding on a database to search, it is important to check the descriptive information, or documentation, available at the Pharmacy Library to determine the characteristics listed below:

- Subject matter and types of publications indexed
- Dates of publications included
- Whether there is a printed equivalent
- Cost to search the database and any extra charges to print citations
- Frequency of updating

(See Chapter 2 for more information on database documentation.)

There are a number of useful databases available for searching the pharmaceutical and chemical literature. The major ones have been listed below along with their respective DIALOG file numbers. The DIALOG file number is used to tell the system which database you want to search. (See Chapter 4 for more information on selecting a database.)

<u>DATABASE</u>	<u>DIALOG FILE NUMBER</u>
1. MEDLINE (Index Medicus)	154
2. IPA (International Pharmaceutical Abstracts)	74
3. CA (Chemical Abstracts)	311
4. EMBASE (Excerpta Medica)	72
5. PHARMACEUTICAL NEWS INDEX	42

2. PREPARING TO SEARCH

In order to develop an effective search strategy, you should know:

- The general structure of bibliographic databases
- The use of Boolean operators AND, OR, and NOT
- What kind of documentation is available

DATABASE STRUCTURE

An online database is composed of RECORDS, each corresponding to a bibliographic citation to one item (i.e., one journal citation). Each part of the record - author, title, journal name - is known as a FIELD. When formulating his/her search, the searcher instructs the computer to search the author field, title field, journal name field, etc.

The following example shows a Chemical Abstracts citation (with fields labeled) displayed in both online and print indexes.

CHEMICAL ABSTRACTS Print Index Record

abstract number — 97: 181237d Molecular substructure searching: minicomputer-based query execution. Hagadone, T. R.; Howe, W. J. — author(s)
corporate source — (Upjohn Co., Kalamazoo, MI 49001 USA). J. Chem. Inf. (up to 5 listed)
Comput. Sci. 1982, 22(4), 182-6 (Eng). The Upjohn Co. — journal title
COUSIN system is being developed to allow easy access to (abbreviated)
in-house, preclin. compd.-related information. The substructure — language
search capability of COUSIN has been implemented by using a
dedicated minicomputer to perform substructure query execution.
abstract — As a result of the efficiencies possible with the minicomputer
approach, substructure searches over a sample of 63,000-compd.
data base are typically performed in <30 s, thus providing a high
degree of user interaction.
date — volume — pages
& issue

CAS ONLINE
Online Record

abstract number —————

title — AN CAV7(21):1181237d

author — AU Masadone, T. R.; Howe, M. J.

corporate source — CS W. John Co.

journal title — LD Kalamazoo, MI 49001, USA ————— location

document type — SD J. Chem. Inf. Comput. Sci., 22(4), 182-6

(7 types available) — SC 20-5 (History, Education, and Documentation) ————— section code (CA section)

publication year — PY 1982

language — LA Eng

keywords — AB The W. John Co. COUSIN system is being developed to allow easy access to in-house, preclin., compd.-related information. The substructure search capability of COUSIN has been implemented by using a dedicated minicomputer to perform substructure query execution. As a result of the efficiencies possible with the minicomputer approach, substructure searches over a sample of 43,000-compd. data base are typically performed in <30 s; thus providing a high degree of user interaction.

indexing terms — AB mol substructure search system

 — IT Computer program

 — (for mol. substructure searching, COUSIN)

abstract

SEARCHABLE FIELDS

While the same fields appear in printed indexes, the online record typically has a greater number of searchable fields than its printed equivalent. In the following list of searchable fields in Chemical Abstracts, note the additional fields, or access points, searchable online as compared with the printed version of the same citation:

Chemical Abstracts

author
subject
keyword
chemical formula
patent
indexing term

CAS Online

author
subject
keyword
chemical formula
title
registry number
journal name
publication date
abstract

BASIC INDEX

The fields that have subject content are collectively known as the Basic Index. Typically the Basic Index will include the title and subject descriptor fields. If you do not specify which field is to be searched, all of the Basic Index fields will be searched. The Basic Index fields can also be searched individually by adding a two-letter suffix to the search term (described in Chapter 4).

ADDITIONAL INDEXES

All of the other fields, such as the author, the journal name, abstract, date of publication, etc., are collectively known as the Additional Indexes. The additional indexes can be searched by adding a two-letter prefix to the search term (described in Chapter 4).

In a printed index, you are limited to the access points made available by the publisher e.g., the subject index, author index, keyword index. Furthermore, in a printed index, you may search only one field at a time -- you must choose whether to search the subject index, author index, etc. In an online database, however, virtually all the fields may be searched, and you may combine searches of several fields into one search. For example, you may search for articles on a topic limited to a specific year, in a particular language, by a particular author.

BOOLEAN OPERATORS

The computer sees your search as a series of terms, linked together by the logical operators AND, OR, or NOT, taken from a system known as Boolean logic. Boolean operators allow you to combine two or more concepts in order to retrieve bibliographic references on a topic.

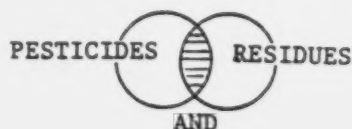
Computer searching parallels to a large degree the process involved in using a printed index. For example, consider manually searching subject indexes for references to documents about pesticide residues. First, the index heading "Pesticides" is located and then the entries listed under the heading are scanned to find those that mention "residues." This process reflects the fact that you are interested in documents that are indexed with both the terms "pesticides" and "residues."

AND

This same search can be accomplished by the use of search terms and Boolean operators. To request the computer to go through the same process, you would type into the online terminal a search statement, sometimes referred to as a search strategy, which combines the terms of interest with the Boolean operator AND.

For Example: pesticides AND residues

This strategy instructs the computer to compare the set of references that are indexed with the term "pesticides" with the set of references that are indexed with the term "residues," and to retrieve only those references that are indexed with both terms. The following Venn Diagram illustrates the resulting set (shaded area):

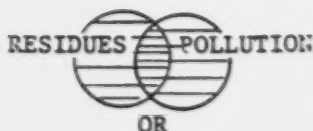


OR

Just as in doing a manual search for a topic in a printed index, alternate terms should also be considered. In computer searching, a reference is retrieved only if there is an exact match between the terms in the search strategy and the terms found in the reference. Therefore, if "pollution" is an alternate term for "residue" in the search, it should be specified in the search strategy. Alternate terms, sometimes called related terms, synonymous terms, or synonyms, are combined in the strategy with the Boolean operator OR.

For Example: residues OR pollution

The use of the OR operator instructs the computer to retrieve references that are indexed with either term, as represented by the Venn Diagram below.



NOT

A third Boolean operator can be helpful in computer searching. The NOT operator is used to exclude references indexed with a specific term. For example, if you were interested in pesticide residues except when they occur in food, the following strategy might be used:

(pesticides AND residues) NOT food

The Venn Diagram for this profile is shown below:



A search strategy utilizing the AND, OR and NOT operators may involve combinations of terms from any searchable field of the bibliographic record, including the following:

DESCRIPTORS--subject terms used by the particular database you are searching.

KEYWORDS--important words or phrases, including new terminology or "buzz words" in your area of research. Keywords should be used when you are unable to locate an appropriate descriptor for your topic.

CODES, TAGS, ETC.,--numeric or other code designators representing specific subject areas or fields (oftentimes very specific in nature--e.g., chemical registry number, document type, etc.,)

For example, in Chemical Abstracts it is possible to search for chemicals by entering their registry number. If you were only interested in pesticide residues of Malathion, you could use the search strategy illustrated in the following Venn diagram:



Descriptors, keywords, codes, and tags may vary from one database to another. Therefore, it is important to consult the printed documentation provided by the database vendor or producer before you begin to construct your search strategy.

DOCUMENTATION

In addition to a general knowledge about the use of Boolean operators, you will need specific information about database structure and the databases that you will be searching.

Documentation is information that tells you what is in a database and how to manipulate the contents of the database to get the results you want. You will find documentation available both in printed form and as part of the ProSearch software. Documentation can come from the database producer (CAS) or from an online service (DIALOG). Documentation is available at the Pharmacy Library.

DATABASE PRODUCER DOCUMENTATION

The primary type of documentation supplied by the database producer is the thesaurus. A good thesaurus will tell you the subject terms, or descriptors, to use when searching by subject and when the descriptors were adopted. A thesaurus will give you a list of related descriptors. It can be one of the most valuable tools available for preparing a search strategy.

A database that has a thesaurus is said to have a "controlled vocabulary." That means that the indexers work only with the descriptors in the thesaurus when assigning subjects to the descriptor field. When using a thesaurus, you often have a large number of potential descriptors from which to choose. What you choose will depend upon a number of factors, such as whether you want everything on a subject, or only a few, highly relevant articles. The thesaurus vocabulary may change over the years, requiring you to consider the time period to be covered when choosing descriptors.

Some producers also send regular newsletters (Medline, for example) that offer helpful searching hints. Producers may also supply search aids, which may range from pamphlets to loose-leaf notebooks, which provide such information as the list of journals indexed and techniques for efficient searching.

ONLINE SERVICE DOCUMENTATION

Online service documentation usually consists of information about the system (features common to all databases) as well as information about the specific features of each database available. The system information is available only in paper, but much of the database-specific information on DIALOG files is available on ProSearch by pressing the Data Sheet key (F7). (See Chapter 5 for more information on the ProSearch software.)

The documentation for specific databases will list the types of subjects covered, the types of materials included (journal articles, reports, etc.), and the source of the content of the file (who produces it). The documentation will also give a sample record and a list of the fields in the record, including the two-letter code to be used for searching specific fields.

3. WRITING THE SEARCH STRATEGY

A search strategy is a logical statement that tells the computer which searching operations you wish to be performed. It employs your knowledge of system commands along with Boolean operators and search terms to precisely define the course of action.

Use a worksheet (sample on page 16) to prepare your search strategy. The worksheet will include places to list your concepts, along with synonyms and other words you plan to use. It will prompt you to think of limiting the search by date, by language, etc., depending upon what the documentation for your database says is possible. You will want to write your ideas on the worksheet.

Writing a search strategy involves the following steps:

1. Write down what you want to know as specifically as possible. This is your search statement.

Is there any literature on the study of
hypertension among the older minority population?

2. Using the available documentation, decide which database(s) might have the answer you are looking for.

MEDLINE

3. Identify the important concepts in your search statement.

CONCEPT 1	CONCEPT 2	CONCEPT 3
hypertension	older population	minorities

4. For each concept identified in step 3, list other words or phrases that could be used to express the same idea or an equally useful idea.

CONCEPT 1	CONCEPT 2	CONCEPT 3
hypertension	aged geriatrics	minority groups Blacks Hispanic Americans Asian Americans

The need for care when choosing the terminology that best describes your topic cannot be overemphasized. You should consult appropriate

thesauri and searching guides in your subject area. They will provide not only synonyms but oftentimes will be useful in helping you better define your search by suggesting alternate terminology and searching codes specific to the database you will be searching. A few of the more useful ones are listed below:

<u>THESAURUS</u>	<u>DATABASE</u>
<u>Medical Subject Headings</u> (MESH)	Medline
<u>Permuted Medical Subject Headings</u> (Permuted MESH)	Medline
<u>Chemical Abstracts Index Guide</u>	Chemical Abstracts
<u>CA Heading List--General Subjects</u>	Chemical Abstracts
<u>CA Heading List--Plants and Animals</u>	Chemical Abstracts
<u>Thesaurus of Subject Terms... to International Pharmaceutical Abstracts</u>	International Pharmaceutical Abstracts
<u>Guide to the Excerpta Medica Classification and Indexing System</u>	EMBASE

5. Decide if the words can be searched in the Basic Index or need to be limited to a specific field.

When you search a database, you may specify which fields of the record are to be searched for each term. You may also simply enter a term and not specify the fields to be searched. When you fail to specify the fields to be searched, the system will, by default, search the Basic Index. Fields that are included in the Basic Index, as well as those included in the Additional Indexes, are clearly labeled in examples given in the documentation for each database. Whether you choose to limit your term(s) to a field will depend upon how frequently the term might appear in the database you have chosen to search. The more common the term, the more likely you are to want to restrict your search to the descriptor and/or title field(s).

6. Consider non-subject parameters that you may want to include, such as limiting the search by date or by language. (Unless you specify otherwise, the system will always assume you want to search the full time-span offered by the database.) Consult the documentation to see what is possible.

I want only articles from 1980 through 1983.
PY = 1980:1983 <DIALOG>

7. Decide on the Boolean connectors to be used in linking the terms you have chosen.

You now have four concepts: the original three and the date. The synonyms listed for each of the original concepts should be connected with OR; the concepts will be connected with AND.

8. Plan how you will alter the strategy if that becomes necessary when online. Your search may retrieve too much or too little information, or not retrieve what you had in mind. In such cases you should be ready to add or delete words or concepts as needed.

EXAMPLE: If you retrieve too much, you may want to leave out the specific minority groups (Blacks, Hispanics, Asians) and get only those articles that discuss minorities in general. Or, you may wish to concentrate on a specific minority group (Hispanics) to narrow the results.

EXAMPLE: If you retrieve too little, you may want to increase the list of terms within your concepts (add specific names, such as Chinese, Puerto Rican, etc.). Or you may wish to leave out the concept of minorities and look for studies on hypertension on the older population in general. Perhaps you may need to consider accepting a longer time span. MEDLINE uses three different files to cover the time period from 1966 to present.

Not all search strategies are equally complex or difficult. You may, in working through the steps outlined above, quickly skip some as inappropriate. Your strategy may be as simple as one word or phrase, such as:

- A single word or phrase from the Basic Index
- A single word or phrase from a specific field
- A single author's name
- A search of some other field, such as a registry number

When doing simple searches, however, it is important to choose a term or phrase that will uniquely identify what you are seeking. If one word or phrase is not adequate to indicate what you want, it is time to consider including additional concepts.

The initial search strategy developed in this chapter is illustrated on the following page. Before this search can be executed, it must be translated into commands recognized by the online service.

SEARCH STRATEGY WORKSHEET

Search Statement HYPERTENSION IN THE AGED MINORITY POPULATION

Relevant Databases MEDLINE

Key Concepts

SYNONYMS

HYPERTENSION	AGED GERIATRICS	MINORITY GROUPS BLACKS HISPANIC AMERICANS ASIAN AMERICANS	
--------------	--------------------	--	--

Publications Dates?

Languages?

Publications Types?

Number citations expected?

Format of citations?

Online or Offline?

4. DIALOG SYSTEM COMMANDS

Each service has a unique set of commands. This chapter will introduce you to DIALOG online system commands. At the end of the chapter, you will find a complete search strategy worksheet showing system dependent information.

Chapter 5 will take you step-by-step through the actual search on DIALOG. CAS (Chemical Abstracts) system commands are covered in Chapter 6. Once you have experience on DIALOG, it will be easy to learn a second system.

SELECTING A DATABASE

Each database on the DIALOG system is searched through a series of commands that you enter at the terminal. In response to the system prompt "?", you enter a command phrase telling the computer what to do, and then press the ENTER key to send the command to DIALOG. The system responds accordingly, following the response with another prompt "?".

Your first step is to select the database you want to search. This is done by entering BEGIN or B (for short), along with the file number of your database as found in the documentation. For example, you would select MEDLINE (File number 154) by entering:

BEGIN 154

OR

B 154

BEGIN may be used at anytime to change databases; however, it also erases all previously created sets.

ENTERING YOUR SEARCH STRATEGY

Records are retrieved by entering the SELECT STEPS command or SS (for short), followed by terms in your search strategy (descriptors, keywords, etc.). Search terms, in general, are SELECTed individually rather than in multiword phrases, and are related to one another through the AND, OR, or NOT Boolean operators. Multiword phrases may be SELECTed by inserting a (W) between all words in the phrase. The (W) connector tells the computer that you are looking for TERM A immediately followed by TERM B. For example:

SS BIOPHARMACEUTICS (single-word example)
 SS CYCLOSPORIN (single-word example)
 SS MYOCARDIAL(W)INFARCTION (multiword example)
 SS SUDDEN(W)INFANT(W)DEATH(W)SYNDROME (multiword example)

Other multiword connectors are:

(F) This requires that each term appear anywhere in the same field, e.g., CYCLOSPORIN(F)DOSAGE

(N) The NEAR connector functions like the (W) connector except that they can be in any word order, e.g., MYOCARDIAL(N)INFARCTION would retrieve both MYOCARDIAL INFARCTION and INFARCTION MYOCARDIAL

When using the (W) or (N) connectors it is possible to specify the number of intervening words you would be willing to accept in the phrase. This is done by placing an appropriate number to the left of the CONNECTOR.

For example:

MYOCARDIAL(1W)INFARCTION would retrieve both MYOCARDIAL INFARCTION and MYOCARDIAL ACUTE INFARCTION

CYCLOSPORIN(2N)ADVERSE would retrieve the term CYCLOSPORIN either next to or within one or two words of the term ADVERSE, in any order.

SEARCHING FIELDS OF THE RECORD

Unless you specify otherwise, items will be retrieved when the terms you SELECT appear anywhere in the Basic Index of the record. The typical Basic Index fields in the bibliographic record are title, abstract, and subject descriptor. For these Basic Index fields, an abbreviated code (e.g., TI for Title) may be used in the SELECT statement to restrict retrieval to only that part of the record. The code follows the term, with a slash in between, as though it were a suffix:

SS CYCLOSPORIN/TI (searches only the title field)
 SS CYCLOSPORIN/TI,AB (searches both titles and abstracts)
 SS CYCLOSPORIN(F)ADVERSE/TI (searches for the terms CYCLOSPORIN and ADVERSE anywhere in the title)
 SS MINORITY GROUPS/DE (searches for the phrase in the descriptor field)

Notice that multiword connectors such as (W) are not necessary when searching a phrase in the descriptor field. The computer treats a multiword descriptor as if it were a single search term.

Other fields are known as Additional Indexes and require the use of a prefix before search terms; thus their field restriction is automatic. Some typical Additional Index fields are author, journal name, and publication year. Some common examples of additional prefix fields are noted below.

<u>FIELD</u>	<u>PREFIX</u>	<u>EXAMPLE</u>
AUTHOR	AU=	AU=BROWN, JOHN
PUBLICATION YEAR	PY=	PY=1983
LANGUAGE	LA=	LA=FRENCH

When dealing with suffix or prefix codes, you should consult available documentation to find the correct entry format, e.g., the data sheet display screens.

COMBINING TERMS WITH SET NUMBERS

Once you have entered your search terms or phrases, DIALOG responds with the posting (number of bibliographic record matches), along with an assigned SET NUMBER.

Every time one or more search terms are SELECTED, they are put into numbered sets for you to use. Once a set number is formed, it may be used as if it were a search term itself. When using set numbers in a SELECT statement be sure to place an S in front of its number, as shown below:

(What the searcher has actually entered at the terminal is indicated by UNDERLINING.)

<u>SET</u>	<u>ITEMS</u>	<u>DESCRIPTION</u>
? <u>SS</u>	<u>Alzheimers(w)disease</u>	
s1	107	alzheimers
s2	2165	disease
s3	94	alzheimers(w)disease
? <u>SS</u>	<u>therapy or treatment or diagnosis</u>	
s4	2334	therapy
s5	1654	treatment
s6	654	diagnosis
s7	4532	therapy or treatment or diagnosis

? SS s3 and s7

	94	s3
	4532	s7
s8	31	s3 and s7

Set numbers can also be selected and combined with any other search term to further refine your search as illustrated below:

? SS s8 and LA=RUSSIAN

	31	s8
s9	2352	LA=RUSSIAN
s10	13	s8 and LA=RUSSIAN

TRUNCATION OF TERMS

Truncation allows you to tell the computer that a word may end with anything after the letter that you specify. A question mark is used to truncate the root of the term.

To permit any number of letters after the root, use a single question mark:

? SS ALZHEIMERS?
? SS HORTICULT?
? SS PY-198?

To permit a specified number of characters after the root, use the question mark in succession:

? SS CAT? ? zero of one character permitted (the space is essential here to show only one additional character following stem -- i.e., CAT or CATS retrieved here.)

? SS CHERR??? number of ? entered indicates maximum number of additional characters following stem (CHERRY or CHERRIES retrieved here.)

To permit any single character inside a term to vary, replace it with a question mark:

? SS wom?n (WOMEN or WOMAN retrieved here.)

AUTHOR SEARCHING

When doing an author search it is a good idea to EXPAND the name online during your search session. The EXPAND command lets you easily identify the exact way your author's name is listed in the file that you are searching (for example, whether initials are used instead of complete spelling of first names).

To do an expand, type EXPAND AU= plus the stem of the author's name you wish to expand (e.g., EXPAND AU=LOKHANDW). You don't need to use the truncation symbol because truncation is implied whenever you use the EXPAND command.

If the name is a common one, you should narrow it down by including one or more initials (e.g., EXPAND Smith, N.). Consult the data sheets to see if commas are used after the last name.

Once you have EXPANDED and looked at the list to determine the author you want, merely SELECT the E number as you would any set number. For example, if you are looking for articles by Nila Banton Smith:

? EXPAND AU=SMITH, N

Ref	Items	Index-term
E1	1	AU=SMITH, MILA BANTON
E2	1	AU=SMITH, N. H. P.
E3		*AU=SMITH, N
E4	1	AU=SMITH, NICK L.
E5	20	AU=SMITH, NILA BANTON
E6	18	AU=SMITH, O. DALE
E7	12	AU=SMITH, PATRICIA

? SS E5

PRINTING YOUR RESULTS

Once you have refined your search and you know which set you want to retrieve, you have options of either viewing them at the terminal or having them printed in DIALOG's office offline to be sent via the mail. Both ways require that you specify a set number, a format, and a group of records to be printed or viewed:

TO DISPLAY ONLINE:

set
TYPE 8/3/1-21 records
 to be printed
 format

TO PRINT OFFLINE:

set
PRINT 8/3/1-12 records
 to be printed
 format

When you enter a PRINT or TYPE command, the first number specifies the set from which records are to be printed; the second number specifies the format; the third number specifies how many records are to be printed (see example above). You will automatically see the record(s) most recently entered into the database.

****NOTE ON FORMAT****

A database may offer up to nine different formats for you to choose. The formats allowed in each bibliographic database are listed in the appropriate DIALOG documentation. The more common ones are listed below:

FORMAT	CONTENT
2	Complete record except abstract
3	Bibliographic Citation
5	Complete Record
6	Accession number + title
7	Bibliographic citation + abstract
8	Accession #, title, + indexing

LOGGING OFF DIALOG

To disconnect from DIALOG type LOGOFF HOLD. By including the word HOLD, DIALOG saves your search strategy for 10 minutes. If you log back on during that time period, DIALOG automatically places you where you left off. This is very handy when you need to logoff to check some terminology or refine your search strategy. You can quickly get back to where you were without losing any of your previously created search.

SEARCH STRATEGY WORKSHEET

Search Statement HYPERTENSION IN THE AGED MINORITY POPULATION

Relevant Databases MEDLINE

Key Concepts

SYNONYMS

23

HYPERTENSION /de	AGED /de GERIATRICS/de	MINORITY GROUPS/de BLACKS /de HISPANIC AMERICANS/de ASIAN AMERICANS/de	
------------------	---------------------------	---	--

Publications Dates? PY=1984:1985

Languages?

Publications Types?

Number citations expected? 10-20

Format of citations? 7

Online or Offline?

5. EXECUTING THE SEARCH

In previous sections you learned how to prepare for an online search, how to construct a basic search strategy, and how to translate your search strategy into commands recognized by the online system. In this section, you will learn how to access the online system and actually perform the search. You should be sitting at the computer for some hands-on practice.

The communications software that you will be using to access the online systems is called ProSearch. ProSearch will allow you to choose an online system and construct an initial search strategy. ProSearch will dial the phone and perform the logon procedures for the system you have selected. You can then review the results of your initial search strategy and modify the search if necessary.

SAMPLE SEARCH

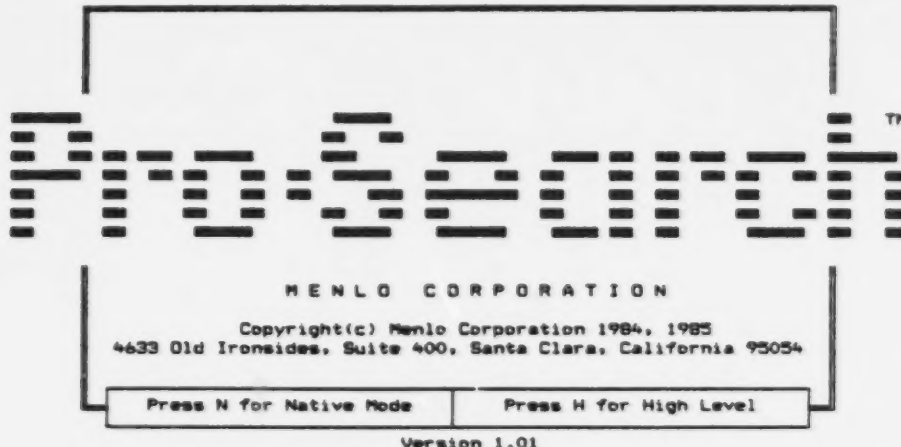
1. TURN ON THE COMPUTER

a. First turn on the computer and the monitor. Flip up the orange switch on the right side of the computer. Turn the top knob on the monitor to the right.

b. Type today's date (month-day-year) and press ENTER (↵). Type the current time (hours:minutes) and press ENTER. Time is entered on a 24-hour clock. For example, 3:00 p.m. is 15:00.

c. When you see the "C:\prosrch>" prompt, type "pro n" and press ENTER. (If the prompt is something else, first enter "cd\prosrch" to get the "c:\prosrch>" prompt.)

d. This ProSearch title screen will appear briefly:



2. CHOOSE AN ONLINE SERVICE

a. The Online Services Directory will appear after the ProSearch title screen:

Online Services Directory		
Service Name		Type-Ahead
BRS	(Automatic Logon Supported)	Yes
DIALOG	(Automatic Logon Supported)	Yes
DIALOG 2	(Automatic Logon Supported)	Yes
CAS Online via Telenet		Yes
RLIN		Yes

To select a service, use the cursor movement keys to move the desired service under the highlight bar, then press J. To delete, change, or add a service, press the Command key (F9) and select the appropriate command.

Buffer= 0% Full

Phone= Offline

b. Scroll through the list of online services by pressing the arrow keys (↑ , ↓). Press ENTER when DIALOG 2 is highlighted. Next you will see a blue screen with a black line near the bottom.

3. SAVE YOUR SEARCH IN A DISK FILE

a. Press the Disk Key (F7) on the left side of the keyboard to begin saving your search on a disk file. You will see a list of files on the screen. You can scroll through one list by using the arrow keys (↑ , ↓).

-DIALOG 2 File 201-

Type-ahead

Retrieve File	Refs	Date	Time	Size
C:				
Name : Smith4	ROGER2	12/04/85	09:04 AM	3341
	SMITH1	12/07/85	10:45 AM	1554
	SMITH2	12/10/85	09:16 AM	3833
	SMITH3	12/10/85	02:02 PM	2233

Select the desired file using the cursor movement keys or type a file name then press J. Press the command key, F9, to change the directory, print a file, view a file or erase a file.

Buffer= 0% Full

Phone= Offline

b. For the file name, type the first six letters of your last name plus a number and press ENTER. For instance, if Smith already has three searches in the list (SMITH1, SMITH2, and SMITH3), he would type SMITH4. After pressing ENTER, you will see the blue screen with the black line near the bottom.

4. ENTER THE INITIAL SEARCH STRATEGY

a. Type the initial search strategy for the "hypertension among the older minority population" search that was developed in Chapter 3. The following example shows how the search strategy is translated into DIALOG system commands.

```
b 154
ss hypertension/de
ss aged/de or geriatrics/de
ss minority groups/de or blacks/de
ss hispanic americans/de or asian americans/de
ss py=1984:1985
```

Buffer= 0% Full

Disk=30% Full

Phone= Offline

Notice that the first command is "b 154" to choose File 154, MEDLINE.

b. The strategy can be revised or edited. Use the cursor control keys to move the cursor to the line you want to edit. Make the change and press ENTER. The following editing keys can be used to make changes at the cursor position. Some of the editing commands require that you hold down the CTRL key (next to "A") while pressing the letter key.

DEL - Delete character at the cursor.

Bksp - (above Enter key) Delete character to the left of the cursor.

Ctrl-T - Delete word to the right of the cursor.

CTRL-N - Insert a carriage return at cursor. (Use to insert a blank line.)

Ins - (lower right of keyboard) Enter insert mode to insert new characters within a line without typing over old characters. Press "Ins" again to leave insert mode.

5. CONNECT TO DIALOG

a. Press the Phone key (F5) to log on (connect) to the DIALOG system. ProSearch will dial the phone and perform the logon procedure. You will be prompted for a password if it has not been preprogrammed.

NOTE: THE COST METER IS NOW RUNNING AND WILL BE UNTIL YOU LOGOFF.

b. Your initial search strategy will be automatically executed.

```
File 154: MEDLINE - 80-86/APR
      Set      Items      Description
? ss hypertension/de
      S1      26782  HYPERTENSION/DE
? ss aged/de or geriatrics/de
      S2      193588  AGED/DE
      S3      1149    GERIATRICS/DE
      S4      193895  AGED/DE OR GERIATRICS/DE
? ss minority groups/de or blacks/de
      S5      273     MINORITY GROUPS/DE
      S6      1690    BLACKS/DE
      S7      1928    MINORITY GROUPS/DE OR BLACKS/DE
? ss hispanic americans/de or asian americans/de
      S8      556     HISPANIC AMERICANS/DE
      S9      118     ASIAN AMERICANS/DE
      S10     657     HISPANIC AMERICANS/DE OR ASIAN AMERICANS/DE
? ss py=1984:1985
      S11     550174  PY=1984:1985
```

6. COMPLETE THE SEARCH STRATEGY

a. Having responded to all of your search terms, the system will stop and wait for additional instructions. At the system prompt "?", enter commands to search additional terms if necessary and to combine sets.

```
? ss s7 or s10
      1928  S7
      657   S10
      S12   2469  S7 OR S10
? ss s12 and s1 and s4 and s11
      2469  S12
      26782 S1
      193895 S4
      550174 S11
      S13   23    S12 AND S1 AND S4 AND S11
```

b. When you have created a set containing the desired citations, use the system commands to either display the citations online or to have the citations printed offline and mailed.

? t 13/7/1-2

13/7/1
1815945 86032945
Coronary heart disease, hypertension and stroke among Japanese-American
men in Hawaii: the Honolulu Heart Program.
Yano K; Reed DM; Kagan A
Hawaii Med J (UNITED STATES) ,Aug 1985, 44 (8) p297-300, 312, ISSN
0017-8594 Journal Code: 81D
Languages: ENGLISH

13/7/2
1776351 85301351
Beliefs about treatment of hypertension among Hispanic older persons.
Ailinger RL
Top Clin Nurs (UNITED STATES) ,Oct 1985, 7 (3) p26-31, ISSN 0164-0534
Journal Code: WAT
Contract/Grant No.: NU 00624
Languages: ENGLISH

7. DISCONNECT FROM DIALOG

a. When your search is complete, enter the DIALOG command for logging off, which is LOGOFF HOLD. The HOLD allows you to log back on within 10 minutes and continue the same search. After 10 minutes, your search strategy and the sets created will no longer be in the Dialog system.

? logoff hold

20jan86 11:09:41 User092188
92.23 0.062 Hrs File154
90.00 2 Types in Format 7
90.00 2 Types
90.37 Dialnet
92.60 Estimated cost this file
92.68 Estimated total session cost 0.068 Hrs.
Logoff: level 7.10.9 11:09:43

The logoff message will include a logoff time and a cost estimate for the search session. This information will be used to fill out the logbook.

8. PRINT THE SEARCH

a. After the search session, which may include logging on and off several times, press the Disk key (F7). This will close the file you have created.

b. To print the file, first turn the printer on. The power switch is on the right, toward the back. The green ready light should be on. If not, press the "online" button.

c. Press the Disk key (F7). Use the arrow keys to highlight the file that you wish to print and press the Command key (F9).

d. Select the print command by pressing the letter "p". Your search session, including the search strategy, the citations you displayed, and the logoff messages will be printed.

e. When printing is complete, press the Command key (F9) and then press "E" to exit the ProSearch program.

GENERAL FEATURES OF PROSEARCH

As you can see from this practice search, the ProSearch program is easy to use. Following is a summary of the general features that you should understand as you use ProSearch.

FREQUENTLY USED KEYS

Keys that are used frequently in Prosearch include:

ENTER (↵) - Pressed to enter a command.

ESCAPE (ESC) - Used to cancel a command or to back up one program step.

CURSOR MOVEMENT KEYS:

ARROW KEYS - Move the cursor or highlight bar one position.

HOME - Move to the beginning of a list.

END - Move to the end of a list.

PgUp - Move up several items in a list.

PgDn - Move down several items in a list.

FUNCTION KEYS

ProSearch also makes use of the function keys on the left side of the keyboard.

HELP (F1) - Press this key at any time to display information about the screen you are on or the command you have selected.

BREAK (F2) - Sends a break to an online system. Used to stop the system from processing a command or to stop displaying a list of citations.

PHONE (F5) - Used to connect or disconnect from an online system.

DATA SHEET (F6) - Used to display information about a database such as fields available for searching. You will be prompted for a DIALOG file number. (Data not available for CAS.)

DISK (F7) - Used to begin or stop saving a search in a disk file.

PRINTER (F8) - Used to begin or stop printing the search as it is run.

COMMAND (F9) - Press at any time to enter the command mode and to display menu of available commands.

COMMAND WINDOW

When the Command key (F9) is pressed, a list of available commands will be displayed near the bottom of the screen. A command can be selected by pressing the letter that is capitalized in the desired command.

buffer Print, buffer Save, change service, High level, Type-ahead, emulation, session, Clear, Exit Print records stored in the buffer.			
Buffer= 0% Full	Disk=27% Full		Phone= Offline

STATUS LINE

The status line at the bottom of the screen shows the condition of various program features, such as whether the search is being simultaneously printed, whether the search is being saved in a disk file, and the status of the phone connection.

Buffer= 0% Full	Disk=27% Full	Printer	Phone= Offline
-----------------	---------------	---------	----------------

****IMPORTANT STATUS NOTES****

When the "Disk = x% Full" message is displayed, your search is being safely saved in a file.

When the "Phone = Online" message is displayed, you are connected to an online system and being charged connect costs.

6. CAS ONLINE SYSTEM COMMANDS

Each file on CAS is searched through a series of commands that you enter at the terminal. In response to the system prompt "=", you enter a command phrase telling the computer what to do, and then press the RETURN key to send the command to CAS. The system responds accordingly, following the response with another prompt "=".

SELECTING YOUR FILE

Your first step is to select the file you want to search. This is done by entering the command FILE followed by the filename. There are four files in CAS ONLINE: HOME, the file you first enter upon accessing the system where the news is located; CA, or Chemical Abstracts file; REGISTRY, and CAOLD, which contains only abstract numbers for registry numbers prior to 1967. For example, to search the CA file, the bibliographic file, you would enter the following:

=> FILE CA

The FILE command may be used at anytime to change files.

ENTERING YOUR SEARCH STRATEGY

Records are retrieved by entering the SEARCH command or S (for short), followed by terms in your search strategy (indexing terms, keywords, etc.). Terms, in general, are SEARCHED individually rather than in multiword phrases, and are related to one another through the AND, OR, or NOT Boolean OPERATORS. Multiword phrases may be searched by inserting a (W) between all words in the phrase. The (W) connector tells the computer that you are looking for TERM A immediately followed by TERM B. For example:

SEARCH (or S) BIOPHARMACEUTICS	(single-word example)
S CYCLOSPORIN	(single-word example)
S MYOCARDIAL (W) INFARCTION	(multiword example)
S SUDDEN(W)INFANT(W)DEATH(W)SYNDROME	(multiword example)
S 123-23-321	(registry number example)

Other multiword connectors are:

(L) This requires that each term APPEAR anywhere in the same field, (e.g., CYCLOSPORIN(L)DOSAGE).

(A) The ADJACENT connector functions like the (N) connector in DIALOG (e.g., MYOCARDIAL(A)INFARCTION would retrieve both MYOCARDIAL INFARCTION and INFARCTION MYOCARDIAL).

SEARCHING FIELDS OF THE RECORD

Unless you specify otherwise, items will be retrieved when the terms you search appear anywhere in the Basic Index of the record. The typical Basic Index fields in the bibliographic record are title, keywords, and indexing terms. For these Basic Index fields, an abbreviated code (e.g., TI for Title) may be used in the SEARCH statement to restrict retrieval to only that part of the record. The code follows the term, with a slash in between, as though it were a suffix:

S CYCLOSPORIN/TI	(searches only the title field)
S CYCLOSPORIN/TI,AB	(searches both titles and abstracts)
S CYCLOSPORIN(L)ADVERSE/TI	(searches for the terms CYCLOSPORIN and ADVERSE anywhere in the title)

Other fields are known as Additional Indexes and also require the use of a suffix after their search term. Some typical Additional Index fields are author, journal name, and publication year. Some common examples of additional suffix fields are noted below.

<u>FIELD</u>	<u>SUFFIX</u>	<u>EXAMPLE</u>
BASIC INDEX	NONE	S 7432-43-4 or S CYCLOSPORIN
AUTHOR	/AU	S BROWN, JOHN/AU
CORPORATE SOURCE	/CS	S DOW(W)CHEMICAL/CS
CONTROLLED VOCABULARY /CV (This relates to the IT field of the citation.)		S RING(W)CLOSURE/CV
DOCUMENT TYPE	/DT	S J/DT (journal)
LANGUAGE	/LA	S FR/LA
CORPORATE SOURCE ADDRESS	/LO	S MIDLAND/LO (Dow Chemical address)

PUBLICATION YEAR	/PY	S 1983/PY
DOCUMENT TITLE	/TI	S HISTORY/TI
ABSTRACT	/AB	S EXECUTION/AB

When dealing with suffix codes, you should consult the appropriate documentation to find the correct entry format.

AUTHOR SEARCHING

When doing an author search it is a good idea to EXPAND the name online during your search session. The EXPAND command lets you easily identify the exact way your author's name is listed in the file that you are searching (e.g., whether initials are used instead of first names being spelled out, etc.). To do an expand, type EXPAND plus the truncated version of your author's name (if the name is fairly uncommon), followed by the /AU suffix (e.g., EXPAND LOKHANDW/AU).

If the name is a common one, you should narrow it down by including one or more initials (e.g., EXPAND Smith, N.). Once you have EXPANDED and looked at the list to determine the author you want, merely SEARCH the E number as you would any set number. For example, if you are looking for articles by David D. Jones:

=>EXPAND JONES/AU

E1 JAMES, J/AU	
E2 JONES/AU*	
E3 JONES, A/AU	
E4 JONES, BJ/AU	
E5 JONES, DD	
E6 JONES, DAVID D/AU	
E7 JONES, DAVIID D/AU	(David is misspelled)
E8 JONES, JAMES/AU	
E9 JONES, JOHN C/AU	
E10 JONES, KE/AU	

=>S E5 OR E6 OR E7

Typographical error is caught with E7.

COMBINING TERMS WITH SET NUMBERS

Once you have entered your search terms or phrases, CAS responds with the posting (number of bibliographic record matches), along with an assigned QUERY NUMBER. Every time one or more search terms are selected, they are put into numbered sets for you to

use. Once a set number is formed, it may be used as if it were a search term itself. When using query numbers in a SEARCH statement be sure to place an "L" in front of its number, as shown below:

(What the searcher has actually entered at the terminal is indicated by UNDERLINING)

=> S HISTORY AND MASS(W) SPECTRO?

23432 HISTORY

5535445 MASS

5432544 SPECTRO?

L1

23 HISTORY AND MASS(W)SPECTRO?

By using S STEPS query numbers are created for intermediate postings. These may be used in subsequent search commands rather than retyping the search statement.

=> S STEPS L1 AND REVIEW

L2 10933 REVIEW

L3 5 L1 AND REVIEW

=> S L2 AND MASS(W)SPECTR?

MASS(W)SPECTR?

TRUNCATION OF TERMS

Truncation allows you to tell the computer that a word may end with anything after the letter that you specify. Three characters are used in truncation: ?, #, and !.

To permit any number of letters after the root, use a question mark:

=> S MASS(W)SPECTRO?

Retrieves spectrometer, spectroscope, spectroscopy, etc.

To select one or no letters use a pound sign:

=> S HEART(W)ATTACK#

Retrieves the phrases heart attack and heart attacks.

=> S BEHAVIO#R

Searches for both behavior and behaviour.

To select one letter only use the !:

=> S WOM!N

Will retrieve either the word WOMAN or WOMEN

RANGE SEARCHING

A strong feature of CAS Online is range searching, or searching a subset of the database. This can be set for a number of parameters; however two of the most useful are Chemical Abstracts collective indexing periods and indexing dates.

- | | |
|---------------------------------|--|
| =>SET RANGE (1980,) | To search from 1980 to the present. |
| =>SET RANGE (1972,1979) | To search between 1972 and 1979. |
| =>S FULVINIC(W)ACID RANGE (9CI) | To search for fulvinic acid in the <u>9TH COLLECTIVE INDEX</u> . |

PRINTING YOUR RESULTS

Once you have refined your search and you know which set you want to retrieve, you have options of either viewing them at the terminal or having them printed at CAS's OFFICE offline to be sent via mail. Both ways require that you specify a query number, a format, and a group of records to be printed or viewed.

To display online:

=>DISPLAY L# BIB ABS 1-5

To print offline:

=>PRINT

It is best to just enter PRINT and allow the explanations to lead you along. Be certain to enter your personal mailing address or else the prints will come to the Library and not directly to you.

****NOTE ON FORMAT****

CAS Online offers a combination of formats to use depending on the file. Those commonly used in the CA file are:

<u>FORMAT</u>	<u>CONTENT</u>
BIB	Bibliographic citation
ABS	Abstract
ALL	The complete record
TRIAL	Title and controlled vocabulary. This is useful to examine results during a search without cost. There is an additional print charge for the other formats.

DISCONNECTING

When finished with the system, be certain to disconnect from the system or logoff. The command is LOGOFF YES.

=>LOGOFF YES

7. PRACTICE SEARCHES

The topics below are provided to give you a chance to practice online searching. These topics illustrate some of the common types of online searches.

This appendix includes completed search strategy worksheets and annotated printouts of actual searches for each of the topics.

1. TOPIC: Find English language articles on the use of cryotherapy in treating skin cancer.
2. TOPIC: Find the complete citation to the article written by G. Spira in 1985 on monoclonal antibodies.
3. TOPIC: Find any studies done in France on the use of Vincristine to treat Wilm's tumor.
4. TOPIC: Does caffeine consumption during pregnancy have adverse effects on the newborn? Only interested in human studies.

PRACTICE SEARCH #1

- ① BEGIN in Medline, File 154.
- ② SELECT the Medline descriptors for the main concepts.
- ③ SELECT non-English articles.
- ④ Exclude the non-English articles from Set 3 using NOT.
- ⑤ TYPE the first two records online in Format 3, bibliographic citation only.
- ⑥ LOGOFF HOLD to end the search.

Set	Items	Description
①	21feb86 11:19:14 User092188	
	90.10 0.004 Hrs File1	
	90.04 Uninet	
	90.14 Estimated cost this file	
	90.14 Estimated total session cost	0.004 Hrs.
	File 154: MEDLINE - 80-86/MAR	
	Set Items Description	
②	7 ss cryosurgery/ss and skin neoplasms/ss	
	S1 1484 CRYOSURGERY/DE	
	S2 8346 SKIN NEOPLASMS/DE	
	S3 99 CRYOSURGERY/DE AND SKIN NEOPLASMS/DE	
③	7 ss lanngnonenglish	
	S4 463846 LAMONGNONENGLISH	
④	7 ss s3 not s4	
	99 S3	
	463846 S4	
	S5 ss S3 NOT S4	
⑤	7 t 5/3/1-2	
	5/3/1	
	1885374 86042374	
	Warts and other human papillomavirus infections.	
	Przedziewski TP; McEwen C	
	Medical Academy of Warsaw, Poland.	
	Posterol Res (UNITED STATES) ; Nov 15 1985; 78 (9): p91-8. ISSN 032-5461	
	Journal Code: PPX	
	5/3/2	
	1798804 86009804	
	Cryosurgery for palliation.	
	Kuflik SS	
	University of Medicine and Dentistry of New Jersey, New Jersey Medical School.	
	J Dermatol Surg Oncol (UNITED STATES) ; Sep 1985; 11 (9): p867-9. ISSN 0148-0812 Journal Code: HZA	
⑥	7 logoff hold	
	21feb86 11:19:58 User092188	
	90.43 0.012 Hrs File154	
	90.00 2 Types in Format 3	
	90.00 2 Types	
	90.12 Uninet	
	90.22 Estimated cost this file	
	90.29 Estimated total session cost	0.012 Hrs.
	Logoff: level 7.10.10 11:19:58	

PRACTICE SEARCH #2

TOPIC: Find the complete citation to the article written by G. Spira in 1985 on monoclonal antibodies.

SEARCH STRATEGY WORKSHEET

Search Statement: FIND THE COMPLETE CITATION TO THE ARTICLE WRITTEN BY G SPIRA
ON MONOCLONAL ANTIBODIES.
Relevant Databases: MEDLINE, FILE 154

Key Concepts

S
Y
N
O
N
Y
M
S

AU = SPIRA G ?

PY = 1985

MONOCLONAL (W) ANTIBOD ?

Publications Dates? 1985

Languages?

Publications Types?

Number citations expected? 1

Format of citations? FORMAT 3

Online or Offline?

PRACTICE SEARCH #2

- ① BEGIN in Medline, File 154.
- ② SELECT the author's name AND the term for antibodies in the title. Both terms are truncated.
- ③ SELECT articles written in 1985.
- ④ Use AND to select articles from Set 3 that were published in 1985.
- ⑤ TYPE the first two records online in Format 3, bibliographic citation only.
- ⑥ LOGOFF HOLD to end the search.

①

Set	Items	Description
1	154	
21Feb86	11:32:45	User:09E188
90.37	0.015	Hrs File1
90.15		Telnet
90.52		Estimated cost this file
90.52		Estimated total session cost 0.015 Hrs.

File 154: MEDLINE - 80-86/MAR

②

Set	Items	Description
1	as	aspirin? and antitob?/ti
81	271	ALPHASPIR?
82	23679	ANTISOD?/TI
83	12	ALPHASPIR? AND ANTISOD?/TI

③

④

⑤

⑥

5/3/1
1738585 850517385
Monoclonal antibodies: a potentially powerful tool in the diagnosis and treatment of infectious diseases.
Spira SI, Pollack RR, Bergelson A, Scharff MD
Faculty of Medicine, Technion, Haifa, Israel.
Eur J Clin Microbiol (GERMANY, WEST) Jun 1985; 4 (3): 251-6. ISSN 0722-8811 Journal Code: E97

5/3/8
1488738 850513738
Prevalence of HTLV-III/LAV antibodies among Haitians (letter)
Pischanik AE, Spira TJ, Elie R, Fischl MA, Satchell JP, Arnoux E, Pierre
GD, Laroche AC, Guerin JM, Kaiser-Rancho R
N Engl J Med (UNITED STATES) Jun 27 1985; 312 (26): 1715-6. ISSN 0028-4793 Journal Code: NEM
? logoff hold

21Feb86 11:33:34 User:09E188
90.68 0.019 Hrs File154
90.00 2 Types in Format 3
90.19 Telnet
90.87 Estimated cost this file

PRACTICE SEARCH #3

TOPIC: Find any studies done in France on the use of Vincristine to treat Wilm's tumor.

SEARCH STRATEGY WORKSHEET

Search Statement: FIND ANY STUDIES DONE IN FRANCE ON THE USE OF VINCRISTINE TO
TREAT WILM'S TUMOR.
 Reference Database: MEDLINE, FILE 154

Key Concepts

SYNONYMS	VINCRIStINE / de	CP = FRANCE	NEPHROBLASTOMA / de
			WILMS TUMOR

Publications Dates?

Language?

Publications Types?

Number citations expected? 5

Format of citations? 3

Online or Offline?

PRACTICE SEARCH #3

- ① BEGIN in Medline, File 154.
- ② SELECT the Medline descriptor "Vincristine."
- ③ SELECT the Medline descriptor "nephroblastoma" OR the phrase "Wilms Tumor" in the Basic Index. Remember, the Basic Index includes several fields, such as the title, the abstract, and the descriptors.
- ④ Combine the two concepts using AND.
- ⑤ SELECT articles published in France.
- ⑥ Use AND to select articles from Set 7 that were published in France.
- ⑦ TYPE the record in Format 3, bibliographic citation only.
- ⑧ LOGOFF HOLD to end the search.

```

①      Set  Items  Description
      * 154
      217000 11:42:03 User02100
      00.10  0.004 Hrs File1
      00.04  Unites
      00.14  Estimated cost this file
      00.14  Estimated total session cost  0.005 Hrs.

File 154=MEDLINE - 80-84/700

      Set  Items  Description
      * 00 VINCRISTINE/DE
      01  001 VINCRISTINE/DE
      * 00 NEPHROBLASTOMA/DE OR WILMS(TUMOR)
      02  1020 NEPHROBLASTOMA/DE
      03  422  WILMS
      04  4400 TUMOR
      05  490  WILMS(TUMOR)
      06  1079 NEPHROBLASTOMA/DE OR WILMS(TUMOR)
      * 00 06 and 01
      1079  06
      001  01
      07  44  06 AND 01
      * 00 07 and 06
      08  31408 CH-PRANCE
      * 00 07 and 08
      44  07
      31408 08
      09  1  07 AND 08
      * 1 9/3/1
      9/3/1
      1172960 04012960
      (Diffuse superficial nephroblastomatosis. Chemotherapy. 1 case)
      Nephroblastomose diffuse superficielle. Traitement par chimiotherapie.
      1 observation.
      Lutz P1 Kleinhaus Di Hettler Di Touitou Di Clavert Jms Berland M1 Vetter
      P1 Levy JH
      Service de Pediatrie II, Institut de Puericulture, Strasbourg.
      Presse Med (FRANCE) 102:1 1983. 12 (24) p2097-100. ISSN 0301-1218
      Journal Codes: PMW
      * logoff hold

      217000 11:43:48 User02100
      00.39  0.011 Hrs File154
      00.00  1 Types in Format 3
      00.00  1 Types
      00.11  Unites
      00.30  Estimated cost this file
      00.44  Estimated total session cost  0.014 Hrs.
      Logoff: level 7.10.10 11:43:45
  
```

PRACTICE SEARCH #4

TOPIC: Does caffeine consumption during pregnancy have adverse effects on the newborn? Only interested in human studies.

SEARCH STRATEGY WORKSHEET

Search Statement: DOES CAFFEINE CONSUMPTION DURING PREGNANCY HAVE ADVERSE EFFECTS ON THE NEWBORN?
Relevant Databases: MEDLINE, PLS 12+ HUMAN STUDIES ONLY.

Key Concepts

S
Y
N
O
N
Y
M
S

CAFFEINE /de	PREGNANCY /de	FETUS /de FETAL /de INFANT /de NEONAT ? /ti NEWBORN /ti	LIMIT TO HUMANS LIMIT (SET#)/HUMAN
--------------	---------------	---	---------------------------------------

Publications Dates?

Languages?

Publications Types?

Number citations expected? 30-50

Percent of citations? Format 3

Online or Offline?

PRACTICE SEARCH #4

- ① BEGIN in Medline, File 154.
- ② SELECT the Medline descriptors "caffeine" AND "pregnancy."
- ③ SELECT the Medline descriptors and title words for the concept of "newborn."
- ④ Combine the major concepts using AND.
- ⑤ LIMIT Set 10 to human studies.
- ⑥ TYPE the first two records in Format 3, bibliographic citation only.
- ⑦ LOGOFF HOLD to end the search.

```

①      Set  Items  Description
      * 0154
      217400 11:15:04 User:00100
      00.02  0.001 Hrs File:154
      00.04  Estimated total session cost  0.001 Hrs.

File 154: MEDLINE - 80-86/700

      Set  Items  Description
      * 02 caffeine/de and pregnancy/de
      01  8017  CAFFEINE/DE
      02  80706  PREGNANCY/DE
      03  141  CAFFEINE/DE AND PREGNANCY/DE
      * 03 fetus/de or fetal/de or infant/de or neonat/de or newborn/de
Processing
  04  9773  FETUS/DE
  05  19009  FETAL/DE
  06  101669  INFANT/DE
  07  8911  NEONAT/DE
  08  3766  NEWBORN/DE
  09  188471  FETUS/DE OR FETAL/DE OR INFANT/DE OR NEONAT/DE OR NEWBORN/DE
④      * 03 and 09
      141  03
      188471  09
      010  00  03 AND 09
⑤      * limit 10/human
      011  01  10/HUMAN
⑥      * 11/3/1-2
      11/3/1  1883967  00078967
      (Effect of caffeine on fetal heart rate and caffeine consumption habits
      in pregnant patients)
      Die Wirkung des Koffeins auf die fetale Herzfrequenz und die
      Koffeinmetabolismus-Geschwindigkeit der Schwangeren.
      Rosch B; Pado J; Biondini J; Szall J
      Klinik für Geburtshilfe und Frauenheilkunde, Medizinischen Universität-
      Szeged.
      Zentralbl Gynaecol (Berllyn, East). 1985; 107 (4): p1249-53. (554
      0000-4197 Journal Code: YCS
      11/3/2  1761689  00286009
      Effects of caffeine ingestion during pregnancy.
      Furukoshi M; Sato S; Suzuki M; Hirata M; Tanaka M; Takahashi T
      Gynecol Obstet Internat. 1985; 19 (4): p187-91. ISSN 0368-7324 Journal Code
      FYS
⑦      * logoff hold
      217400 11:37:13 User:00100
      00.68  0.019 Hrs File:154
      00.00  0.000 2 Types in Format 3
      00.10  0.000 0 Lines
      00.87  Estimated cost this file:
      00.91  Estimated total session cost  0.020 Hrs.
Logoff: level 7.10.10 11:37:16
  
```

WELCOME TO
PHARMACY RESEARCH ONLINE

You have received this packet because you expressed an interest in the Pharmacy Research Online pilot project. Participants in the pilot project will be able to use a microcomputer located in the Pharmacy Library to do their own online searching of indexes to the journal literature.

Please complete and return the attached form by May 9th indicating whether or not you will be participating in the project. Please return the packet with the form if you will not be participating.

This packet is designed to be a self-paced introduction to online searching. Follow-up seminars will be scheduled later in May. At these seminars, the Pharmacy Librarian will answer your questions and offer tips on more effective searching.

This packet includes:

- xx Welcome to Pharmacy Research Online
- xx Pharmacy Research Online Procedures
- xx Pharmacy Research Online: A Guide for Faculty
- xx Search Strategy Worksheets
- xx Evaluation Questionnaire
- xx Dialog Command Summary
- xx CAS Online Command Summary
- xx Interlibrary Loan Guide
- xx Staffed Faculty Photocopy Service Guide

We suggest the following steps as the most efficient way to use this packet.

1. Complete and return the attached form indicating that you will be participating in the project.
2. Review the Pharmacy Research Online Procedures.
3. Read the self-paced workbook entitled Pharmacy Research Online: A Guide for Faculty and work through the sample search in Chapter 5.
4. Try the practice searches in Chapter 7.

5. Complete and return the Evaluation Questionnaire.
6. Attend a follow-up seminar. The schedule and a sign-up sheet will be posted in the Pharmacy Library.

Please call the Pharmacy Librarian, Derral Parkin (x7348), if you have any questions about the project or have problems as you are learning to search. In addition, Derral is usually in the Pharmacy Library on Tuesdays and Thursdays from 10 a.m. until 12 noon and Fridays from 3 p.m. until 5 p.m.

PHARMACY RESEARCH ONLINE

Please fill out this form and return it to Derral Parkin, Lib - L.
(The form is pre-addressed; just fold it and put it in intercampus
mail.) Thank you.

_____ YES. I will be participating in the
Pharmacy Research Online pilot project.

_____ NO. I will not be participating in the
Pharmacy Research Online pilot project. I am
returning the packet with this form.

If not, we would be interested in knowing why
not:

NAME: _____

DEPT: _____

PHONE: _____

Please return this form by May 9th.

Thank you.

PROCEDURES

PHARMACY RESEARCH ONLINE

1. HOURS OF OPERATION

The computer in the Pharmacy Library is generally available for online searching during normal Library hours until one half hour before closing. Project participants may reserve computer time by contacting the Circulation Desk, x1566.

2. LOG BOOK

All searches must be recorded in the log book located near the computer. A completed sample log sheet is attached. The time and cost information is necessary for our accounting records. Your answers in the evaluation section will be used in the evaluation of the pilot project.

3. OFFLINE PRINTS

Offline prints from Dialog will be received by the Library and sent to you through interoffice mail. Be sure to record the print transaction number on the log sheet.

? pr 16/7

P1161 PRINT 16/7 (items 1-13) est. cost of \$1.82
? losoff

Offline prints from CAS Online will be mailed directly to you. Just remember to fill in your name and address when prompted by the PRINT command.

4. PRACTICE SUBSIDY

Each project participant is allowed a practice subsidy of \$112.50. This will give each person approximately 2 1/2 hours of practice time. Each person is responsible for not exceeding the \$112.50 of subsidized searching. The free practice time must be used before July 1, 1986.

5. PAYMENT FOR SEARCHES

After using the \$112.50 practice subsidy or after July 1, whichever comes first, searchers will be responsible for paying for all search costs incurred. Payment may be made by check or IDT (cash will not be accepted). Deposit accounts may be set up for individuals or groups. All search costs and payment information must be recorded in the log book. Payment should be given to the Library staff.

6. DISK FILES CONTAINING SEARCHES

Project participants are asked to save all searches in a disk file as outlined in Chapter 5 of the "Pharmacy Research Online" workbook. The searches in disk files will be matched with the evaluation questions on the log sheets and used in the evaluation of the project. Searchers may make copies of their own searches using their own floppy disks.

7. DOCUMENTATION

The thesauri and other documentation necessary for online searching is kept in the Pharmacy Library. It can be used only in the Library.

8. USE OF THE COMPUTER FOR NON-COMPUTER SEARCHING USE.

Because the computer is also used for other Library-related tasks (word processing, database, etc.), participants should not use the computer for non-computer searching functions.

9. ASSISTANCE

The Library Technician is available to assist with searching problems. For assistance with search strategies, call Derral Parkin (x7348).

HOW TO COMPLETE THE LOG SHEET

DIALOG LOGOFF MESSAGE

? logoff hold

21feb86 11:57:15 User092188
 \$0.68 0.019 Hrs File154
 \$0.00 2 Types in Format 3
 \$0.00 2 Types
 \$0.19 Uninet
 \$0.87 Estimated cost this file
 \$0.91 Estimated total session cost 0.020 Hrs.
 Logoff: level 7.10.10 11:57:16

CAS ONLINE LOGOFF MESSAGE

=> logoff yes

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	8.76	8.76
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)		
CA SUBSCRIBER	-1.68	-1.68

STN INTERNATIONAL LOGOFF AT 19:37:00 ON 07 APR 86

ACCOUNTING PORTION OF LOG SHEET

PHARMACY ONLINE LOGSHEET

DATE 4/28/86 NAME Janet Smith
 DEPT Pharmacology PHONE x 6262

Please check the Online Service(s) used and record the time and cost information from the logoff messages.

DIALOG ☒ LOGOFF TIME <u>11:57:15</u> TOTAL SESSION COSTS <u>.91</u> DATABASES SEARCHED: <u>154 Medline</u> OFFLINE PRINT TRANSACTION NUMBER _____	CAS ONLINE ☒ LOGOFF TIME <u>19:37:00</u> FULL EST. COST <u>8.76</u> DISCOUNT AMOUNT <u>1.68</u> $\text{COST} = .10 \times (\text{FULL COST} - \text{DISCOUNT})$ <u>.71</u> = .10 x (<u>8.76</u> - <u>1.68</u>) OFFLINE PRINT REQUEST NUMBER _____
---	---

METHOD OF PAYMENT (give payment to Eric Waggoner, Derral Parkin or Dell Stewart-Davis)

☒ Deposit Acct: Name account is under? Smith
 _____ IDT: IDT number? _____
 _____ CHECK: Make your check payable to the University of Houston
 _____ Training Subsidy: Not to exceed \$112.50 per person

ALSO FILL OUT THE EVALUATION PORTION OF THE LOG SHEET.

DIALOG COMMAND SUMMARY

BASIC COMMANDS

Command	Example	Function
BEGIN	begin 10 b 49	BEGIN connects you to the database in which you want to search. Enter the file number after the command. BEGIN may be used at any time to change databases; however, it also erases all your previous sets.
SELECT	select france s computer ss wine? or drink ss s4 not champ?	SELECT retrieves records containing search term or terms you indicate and stores them in sets. Each set is assigned an S#. A set may be used in later SELECTS by indicating its S#. The abbreviation SS rather than S will produce a separate set for each search term SELECTed .
TYPE	type 7/6/2-3 t 8/5/1,3,7	TYPE requests that your results be displayed immediately. It is followed by a set number, a format number, and the group of records you wish to view.
PRINT	print 7/5/1-31 pr 12/7/1-64	PRINT requests that results be printed offline and mailed to you. Specify set/format/records desired.
LOGOFF HOLD	logoff hold	LOGOFF HOLD will disconnect you from DIALOG , but will have the system hold your most recent search for a minimum of ten minutes, so you can RECONNECT to the search by logging on again. It produces an estimate of the cost of your search session since logging on.

LOGICAL CONNECTORS

OR - puts the retrieval of all the search items into one set, eliminating duplicate records.



AND - retrieves the intersection, or overlap, of the search terms: all terms must be in each record retrieved.



NOT - eliminates one search term (or group of search terms) from other search term(s).



POSITIONAL CONNECTORS

Connector	Example	Function
(W) (nW)	plant(W)production production(1W)plant?	Terms must be adjacent to each other and in the order specified. A number in front of the W indicates maximum number of possible intervening words.
(N) (nN)	ronald(N)reagan	Terms must be adjacent to each other and in either order. A number in front of the N indicates the maximum number of possible intervening words.
(F)	economic(F)recovery	Terms must be in the same field of the same record, in any order.

SUPPLEMENTARY COMMANDS

Command	Example	Function
EXPAND	expand iron e au=bronte	EXPAND displays the word list, or index, of the database. the entries in the list which displays may be SELECTed by their E numbers
PAGE	page p	PAGE requests the following page or screen of an EXPAND
LIMIT	limit5/maj 18/eng	LIMIT restricts a set by some criteria defined by the database, most frequently English language, or time period. Its use varies in each database.
PRINT-	print- p078 pr- pl46	PRINT- cancels the print command whose PRINT transaction number you enter. PRINT transaction numbers are assigned by the computer at the time that the PRINT request is made.
COST	cost	COST produces a display of the estimated cost of your search session since logging on.
D SETS	display sets ds	DISPLAY SETS lists all the sets formed since the last BEGIN command.

CAS COMMAND SUMMARY

BASIC COMMANDS

Command	Example	Function
FILE	file ca file reg file caold	FILE connects you to the database in which you want to search. Enter the file name after the command. FILE may be used at any time to change databases. It does not erase your previous query numbers.
SEARCH	search titanium s coal/ti s 12 and analysis	SEARCH retrieves records containing the search term or terms you indicate, and stores them in query sets. Each query set is assigned an L#. A set may be used in later SEARCH statements by indicating its L#.
DISPLAY	display 12 bib 1 d 11 bib abs 1-3	DISPLAY requests that your results be displayed at your terminal immediately. It is followed by a query number, a format, and the group of records you wish to view.
PRINT	print	PRINT requests that results be printed offline and mailed to you. The simplest way to order prints is to enter the command PRINT and let the computer prompt you for the required information.
LOGOFF YES	logoff yes logoff y	LOGOFF YES ends the search session and disconnects you from STN. It produces an estimate of the cost of your session since logon.

LOGICAL CONNECTORS

OR - puts the retrieval of all the search items into one set, eliminating duplicate records.



AND - retrieves the intersection, or overlap, of the search terms: all terms must be in each record retrieved.



NOT - eliminates one search term (or group of search terms) from other search term(s).



POSITIONAL CONNECTORS

Connector	Example	Function
(W) (nW)	plant(W)production production(2W)plant	Terms must be adjacent to each other and in the order specified. A number in front of the W indicates maximum number intervening words.
(A)	linus(A)Pauling coffee(3A)analysis	Terms must be adjacent to each other and in either order. A number in front of the A indicates the maximum number of intervening words.
(L)	mass(L)spectroscope	Terms must be in the same field of the same record, in any order.

SUPPLEMENTARY COMMANDS

Command	Example	Function
EXPAND	expand iron e Pauling/au	EXPAND displays the word list, or index of the database. The entries in the list which displays may be SEARCHED by their E numbers.
HELP	help	Obtain HELP while logged on. Displays general information about the help function or commands.
DIS HIS	display history d his	DIS HIS displays all of the sets formed during the search session.
SET	set steps on set range = (1980,)	SET defines the session parameters. See vendor documentation for exhaustive list of possible parameters.

SEARCH STRATEGY WORKSHEET

Search Statement _____

Relevant Databases _____

Key Concepts

S
Y
N
O
N
Y
M
S

--	--	--	--

Publications Dates?

Languages?

Publications Types?

Number citations expected?

Format of citations?

Online or Offline?

EVALUATION

When you have completed the Pharmacy Research Online training manual please answer the following questions by circling the appropriate number on the scale. Return the questionnaire to the Library through intercampus mail by folding. (Return address is printed on back of p. 2.)

1. Did the training manual clearly present the material?

Very Clear		Clear		Not Clear
1	2	3	4	5

2. Were the instructions in the self-paced manual clear?

Very Clear		Clear		Not Clear
1	2	3	4	5

3. Were you comfortable with this method of instruction?

Very Comfortable		Comfortable		Uncomfortable
1	2	3	4	5

4. Was this method of instruction compatible with your learning style?

Very Compatible		Compatible		Incompatible
1	2	3	4	5

5. Do you feel comfortable doing your own online research?

Very Comfortable		Comfortable		Uncomfortable
1	2	3	4	5

6. Do you have an improved understanding of microcomputers and their applications?

Improved		Slightly Improved		Not Improved
1	2	3	4	5

7. How confident do you feel in determining when to search online instead of searching the printed indexes?

Very Confident		Confident		Not Confident
1	2	3	4	5

8. Do you feel these training materials have improved your ability to articulate your research needs to a librarian?

Greatly Improved		Improved		Not Improved
1	2	3	4	5

9. To what extent did these training materials broaden your awareness of available services and resources within the library?

Greatly Increased		Increased		Not Increased
1	2	3	4	5

10. Are you interested in advanced training in search strategy development?

Very interested		Interested		Uninterested
1	2	3	4	5

11. Are you interested in advanced training in specific databases?

Very Interested		Interested		Uninterested
1	2	3	4	5

12. Are you interested in advanced training in system commands?

Very Interested		Interested		Uninterested
1	2	3	4	5

13. Are you interested in advanced training in microcomputer applications?

Very Interested		Interested		Uninterested
1	2	3	4	5

14. How long did it take you to complete the training materials?

1-2 Hours	2-3 Hours	3-4 Hours	4-5 Hours	5 Hrs. or more
1	2	3	4	5

Comments:

Thank you.